

REMARKS

The Examiner is thanked for the thorough examination of this application. The FINAL Office Action, however, has continued to reject all claims 1-20 under 35 U.S.C. § 103(a), using a variety of combinations of references. In this regard, claims 1-4 and 8-10 are rejected under 35 U.S.C. 103(a) as being obvious over Rho et al US PG Publication No. 2004/0080684 and in view of Watanabe et al. US patent No. 6,573,969 and further in view of Kim et al. US Patent No. 6,038,008.¹ Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rho et al and Watanabe as applied to claim 4 above, and further in view of Endo et al US patent No. 6,033,813 and Nishikawa et al US Patent No. 6,426,166. Claims 11-14 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seki et al. US Patent No. 6,633,353 and further in view of Rho et al US PG Publication No. 2004/0080684 and Kuo et al US Patent No. 6,424,397 and Kim.² Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rho, Kuo, and Seki, and further in view of Endo et al US patent No. 6,033,813 and Nishikawa et al US Patent No. 6,426,166.

The present Office Action has advance very similar rejections to those set out in the previous rejection, but combines an additional reference (e.g., Kim combined with the previous combination to reject claim 1). Therefore, Applicants continue to maintain all previous bases for distinction, and hereby repeat and reallege those bases herein. In addition, Applicants respectfully submit that the Office Action was remiss in failing to address or respond to many of

¹ NOTE: On page 2 of the Office Action, the Office Action actually references U.S. Patent 5,920,084 to Gu et al, in forming the rejection. However, on page 3 (in the body of the rejection), the Office Action applies U.S. Patent 6,038,008 to Kim.

² NOTE: On page 6 of the Office Action, the Office Action makes no reference of U.S. patent 6,038,008 to Kim, in forming the rejection. However, on page 8, the Office Action relies on the teachings of Kim to complete the actual rejection of claim 11.

Applicants' previous arguments. Instead, the Office Action merely stated that Applicants' remarks were moot in light of the new grounds for rejection (see Office Action, p. 2). As an example, one of Applicants' previous arguments traversed the combination of Rho and Watanabe (as lacking the proper motivation). The present Office Action maintained this combination, and even added a third reference to the combination, but wholly failed to respond to Applicants' traversal of the combination of Rho and Watanabe.

For at least the reasons set forth herein, Applicants disagree and respectfully request reconsideration and withdrawal of the rejections.

Discussion of Independent Claim 1

Among other features, independent claim 1 recites "*a transparent organic planarization layer formed on the color filter having a first thickness portion and a second thickness portion*" and "the planarization layer is opposite to the lower substrate" (*Emphasis added*).

The *transparent organic planarization layer* cited in claim 1 is provided to planarize the color filter *having a first thickness portion and a second thickness portion* of a transfective LCD.

The Office Action admits that Rho does not teach a planarization layer formed on the color filter. Instead, the Office Action cites Watanabe as allegedly teaching a liquid crystal display with a planarization layer between the color filter and upper electrode creating a smooth surface. However, Applicants respectfully submit that Watanabe fails to teach or suggest the planarization layer is suitable for the color filter *having a first thickness portion and a second thickness portion* of a transfective LCD. In fact, Watanabe lacks any suggestion that the planarization can

be modified to apply on the color filter *having a first thickness portion and a second thickness portion*. Moreover, Watanabe fails to teach or suggest that the planarization layer is *transparent organic*. Applicants therefore respectfully submit that neither Rho nor Watanabe, singly or in combination, teach or suggest the claimed feature that the *transparent organic planarization layer* formed on the color filter *having a first thickness portion and a second thickness portion* of a transfective LCD. (*Emphasis added*). For at least this reason, the rejection of claim 1 should be withdrawn.

In addition, the Office Action further states that Kim teaches a planarization layer formed of BCB as having a good leveling property. Nonetheless, the BCB layer disclosed by Kim is a protection layer on TFT substrate, *i.e.* on a lower substrate of an LCD. Applicants respectfully submit that Kim fails to teach or suggest that the planarization layer is opposite to the lower substrate. Moreover, Kim fails to teach or suggest that the protective layer formed of BOB layer is a planarization layer formed on the color filter *having a first thickness portion and a second thickness portion*.

For at least the foregoing reasons, claim 1 patently defines over the cited art. As claims 2-10 directly or indirectly depend from claim 1, claims 2-10 are patentable by virtue of their dependency from patentable claim 1.

As a separate and independent basis for Applicants' traversal of the rejection of claim 1, Applicants respectfully submit that the Office Action has failed to cite a proper motivation for combining the references. In Applicants' previous response, Applicants cited relevant case law and noted their traversal of the combination of Rho and Watanabe. Applicants hereby repeat and reallege that traversal. In addition, Applicants further submit that the present Office Action has

failed to cite a proper motivation for adding Kim to this combination. In this regard, the present Office Action states only that the combination of Kim would have been obvious "because of its good leveling properties." However, Kim is applied for allegedly disclosing a transparent layer. Applicants fail to see the correlation or relevance of any alleged leveling properties of Kim, with respect to the transparent property for which it is applied. For at least this additional reason, the rejection of claim 1 is misplaced and should be withdrawn.

Discussion of Independent Claim 11

Among other features, independent claim 11 recites "**a color filter having various thicknesses formed on the lower electrode**" and "***a transparent organic planarization layer formed on the color filter***" (*Emphasis added*).

The Office Action admits that Seki fails to disclose a color filter having various thicknesses. Rho teaches a color filter having various thicknesses except a planarization layer formed on the color filter, and instead applies Rho for allegedly teaching this claimed feature. Applicants disagree. In this regard, Applicants respectfully submit that Rho fails to teach or suggest that the color filter **having various thicknesses** is formed on the lower electrode, wherein the lower electrode has *a transmissive portion and a reflective portion*. More specifically, neither Seki nor Rho, singly or in combination, teach or suggest that a ***transparent organic planarization layer*** is formed on the color filter having a first thickness portion and a second thickness portion, and the first thickness portion corresponds to the transmissive portion and the second thickness portion corresponds to the reflective portion. For at least this reason, the rejection of independent claim 11 should be withdrawn.

In addition, the Office Action further states that Kim teaches a planarization layer formed of BCB as having a good leveling property. Nonetheless, the BCB layer disclosed by Kim is a protection layer on TFT substrate, *i.e.* on lower substrate of an LCD. Applicant respectfully submits Kim fails to teach or suggest the protective layer formed of BOB layer is a planarization layer formed on the color filter having a first thickness portion and a second thickness portion on the lower electrode, wherein the first thickness portion corresponds to the transmissive portion and the second thickness portion corresponds to the reflective portion.

For at least the foregoing reasons, independent claim 11 patently defines over the cited art of record. As claims 12-20 directly or indirectly depend from claim 11, claims 12-20 are patentable by virtue of their dependency from patentable claim 11.

As a separate and independent basis for Applicants' traversal of the rejection of claim 11, Applicants respectfully submit that the Office Action has failed to cite a proper motivation for combining the references. In Applicants' previous response, Applicants cited relevant case law and noted their traversal of the combination of Seki, Rho, and Kuo. Applicants hereby repeat and reallege that traversal. In addition, Applicants further submit that the present Office Action has failed to cite a proper motivation for adding Kim to this combination. In this regard, the present Office Action states only that the combination of Kim would have been obvious "because of its good leveling properties." However, Kim is applied for allegedly disclosing a transparent layer. Applicants fail to see the correlation or relevance of any alleged leveling properties of Kim, with respect to the transparent property for which it is applied. For at least this additional reason, the rejection of claim 1 is misplaced and should be withdrawn.

For all of these reasons, Applicants submit that this application is now in condition for allowance. Prompt issuance of a Notice of Allowance is earnestly solicited.

No fee is believed to be due in connection with this amendment and response. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,



Daniel R. McClure
Registration No. 38,962

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.
Suite 1750
100 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 933-9500